Strategic use of technology and multimedia

A key principle in the California ELA/ELD Framework is that the instructional materials should "promote the use of multimedia and technology... to enhance reading, writing, speaking, listening, and language standards and skills by teachers and students." The Amplify ELA curriculum embodies this principle—the whole program uses technology almost every day as a central medium in which reading, writing, speaking, listening, language, and skill development happens.

Amplify ELA uses technology and media in ways that are significant innovations upon previous efforts to apply technology to education. Amplify ELA uses technology not for technology's sake, but rather to foster *more human interaction* than occurs in ordinary classrooms. The technology we use is designed not to shrink the classroom experience onto the screen, but rather to expand what is possible for teachers and students to experience in a classroom. We expand the teacher's capacity to lead a class, to engage students, to provide targeted feedback, and to foster collaboration. We expand students' opportunities to close read, to argue from evidence, to participate in academic discourse, to make sense of complex literary and informational texts, to collaborate with peers, to express themselves in a community, and in general to develop the "capacities of literate individuals" as described in the California ELA/ELD Framework.

Our strategies for using technology in our curriculum have been guided by Larry Berger, who has served as an expert contributor to the President's Council of Advisors on Science and Technology, the Carnegie Institute for Advanced Study Commission on Mathematics and Science Education, the National Research Council forum on adaptive learning, and as an advisor to the innovation programs of the Bill and Melinda Gates Foundation.

Amplify ELA is built upon a set of core principles about the potential for technology to improve education. We believe that technology should:

- **Empower teachers** to extend their reach and expand their impact—not replace human teaching.
- **Engage students** with dynamic Learning Experiences that are rigorous and riveting.
- **Build community** by sparking rich discussions and meaningful collaborations.
- **Fit seamlessly** into existing classroom rhythms through intuitive user experience.
- **Differentiate** the level and approach to learning across students with different needs.
- **Support accessibility** of Learning Experiences for all students.
- **Use real-time data** to give students constructive feedback and help teachers respond to student needs.

The Amplify ELA curriculum has been tested thoroughly, with real teachers and students, and revised accordingly over more than ten years of development on paper and over four years of development in software. We have held ourselves to the standard that technology must always deliver a result in teaching a standard or skill, or contribute to a class environment that has more human interaction and community than before the technology was introduced. In our testing, whenever we found that this was not the case, we removed that component from Amplify ELA.

By enabling teachers to track progress and comment on student work with digital tools, Amplify ELA provides an "ongoing sense of where students are during the lesson," as recommended in the CA ELA/ELD Framework. Students are consistently prompted to share, discuss and problem-solve, and the results of these activities are available to the teacher in real time. Often a sequence of lessons culminates in a multimedia-rich Quest—a social, collaborative performance task in which students play roles, solve mysteries, and interact with characters from their reading. Again, the technology supports teachers in knowing where each student is in the flow of these activities and in giving students differentiated supports.

The California ELA/ELD Framework also highlights that for today's students, strategic engagement with technology and digital media is itself a critical component of literacy. For that reason, our curriculum explicitly helps students learn effective and appropriate use of technology for research, integration of dynamic media, and sharing of ideas. In Amplify ELA, students are challenged to gather evidence and to assess its validity; to comprehend, compare, and enjoy texts and media from wide-ranging sources; to make videos and prepare multimedia presentations; and to express and publish information and opinion using digital media and technology.

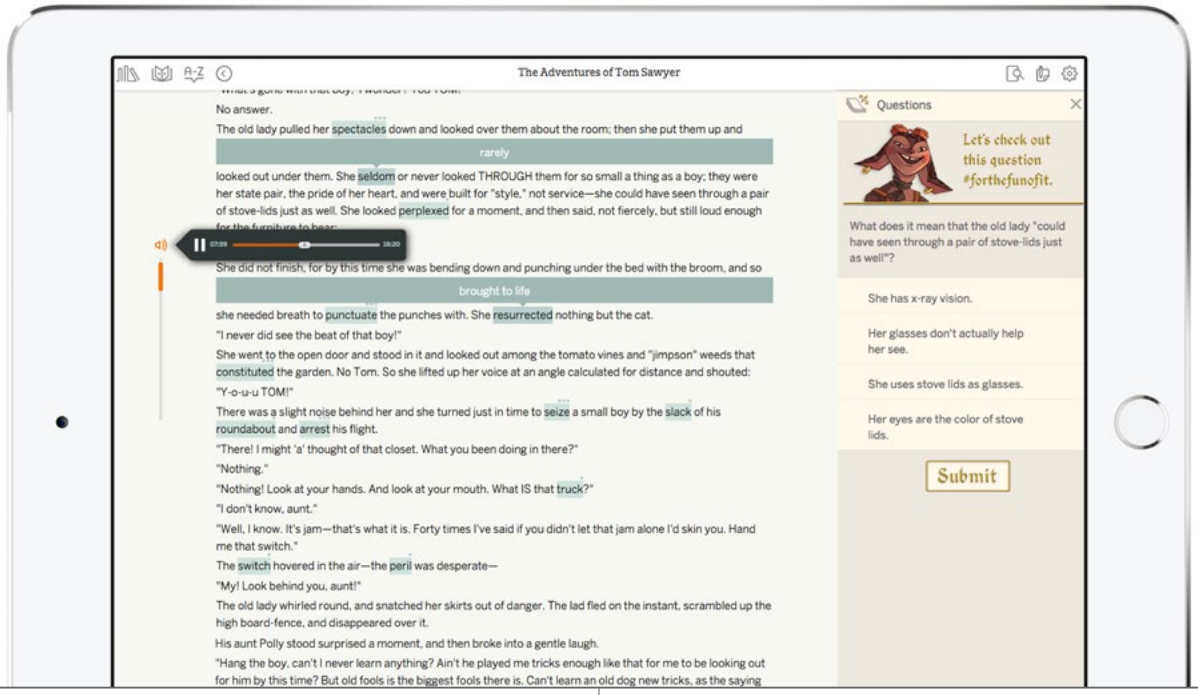
The following pages outline specific examples of the multimedia and technology that we use to address the California ELA/ELD Framework.

Sampling of technology components and standards alignment

Reading

Virtual library, plus an eReader with vocabulary scaffolds, audio support, and interactive questions

In addition to the texts in the curriculum, we provide students with a digital library of more than 600 texts of interest to middle-schoolers, including some in Spanish. The texts have diverse authors and characters. Students can access these texts in an eReader that provides special supports for middle school readers, as well as Universal Design supports.



Why it is riveting	Why it is rigorous
Our selection of more than 600 texts are of interest to middle school students. The texts have diverse authors and characters; many are in Spanish. Some will be challenging, especially for below-grade-level readers, but built-in vocabulary support, forums, and book clubs give task-level support. The Questionary is an embedded game that provides playful quiz questions about the book. Answering these questions helps students self-assess, and in the accompanying game world it helps their avatar advance to higher levels.	A goal of Amplify ELA is to increase the amount of reading that students do in their free time. There are a range of simpler texts on which students could exhibit mastery, and there are a range of quite difficult texts that challenge students to reach the next level as readers. Because the library is digital, teachers can keep track of student reading and set goals that make students more likely to read and to read more.

Skills, standards it addresses:

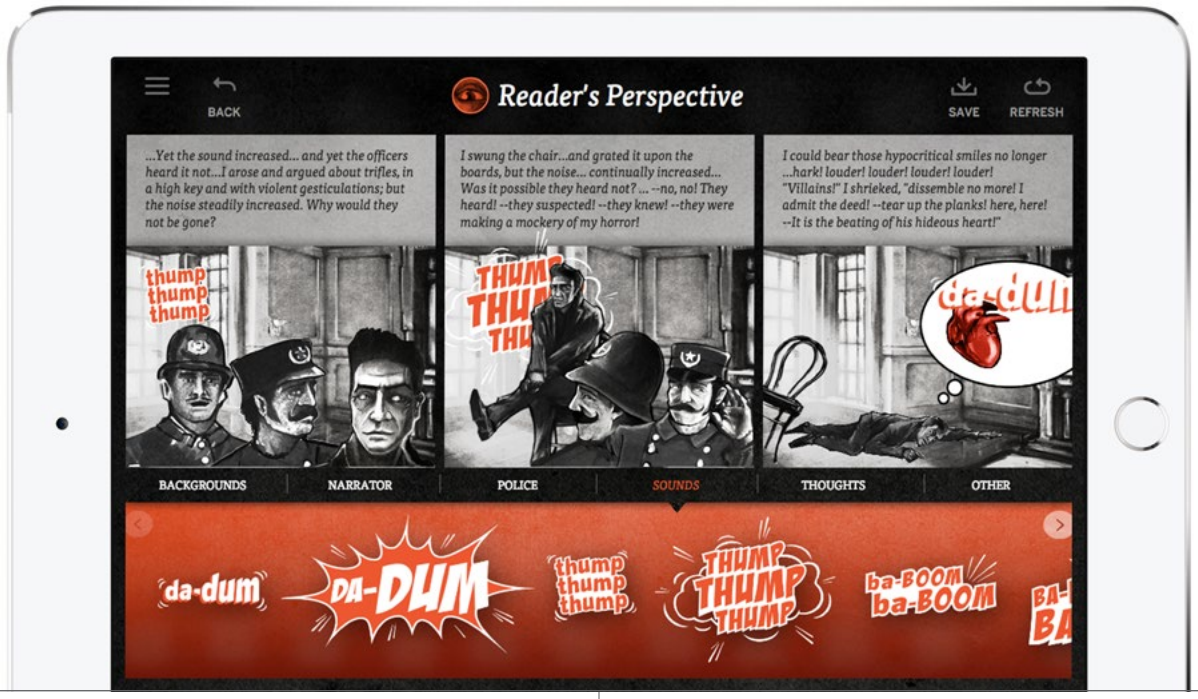
RI.6.7, RI.7.7, RI.8.7, RL.6.7, RL.7.7, RL.8.7, L.6.4c, L.7.4c, L.8.4c

Sampling of technology components and standards alignment

Reading

Storyboard applications

For certain challenging texts in the curriculum (such as a Sherlock Holmes mystery or a Poe story), the curriculum provides students with a storyboard authoring tool, The Tell-Tale Art, to help students develop the close reading skill of visualizing what is happening—who the characters are, where they are, what each character is thinking, what each character is saying, and in the case of "The Tell-Tale Heart," what sound the heart is making.



Why it is riveting	Why it is rigorous
Students who struggle with a complex text often fail to visualize anything when they read it. Often these students are quite good at reading graphic novels, and understanding complex dialogue and plot in movies. The storyboard tool helps students to learn that they can make their own mental images of a complex text as a way to read it more closely. The objects students are called upon to place in the storyboard are those we are hoping the student will notice (e.g. what are the police thinking in the final paragraph of "The Tell-Tale Heart"?)	The point of this tool is *not* to illustrate the story. The point is to develop the close reading technique of deciphering a complex text by visualizing it. In the case of The Tell-Tale Art, students visualize the same story once from the narrator's and once from the reader's perspective—and then use the differences between the storyboards to discover for themselves that this is an "unreliable narrator." This is a challenging concept for students to grasp, but it becomes quite concrete after using the storyboard tool.

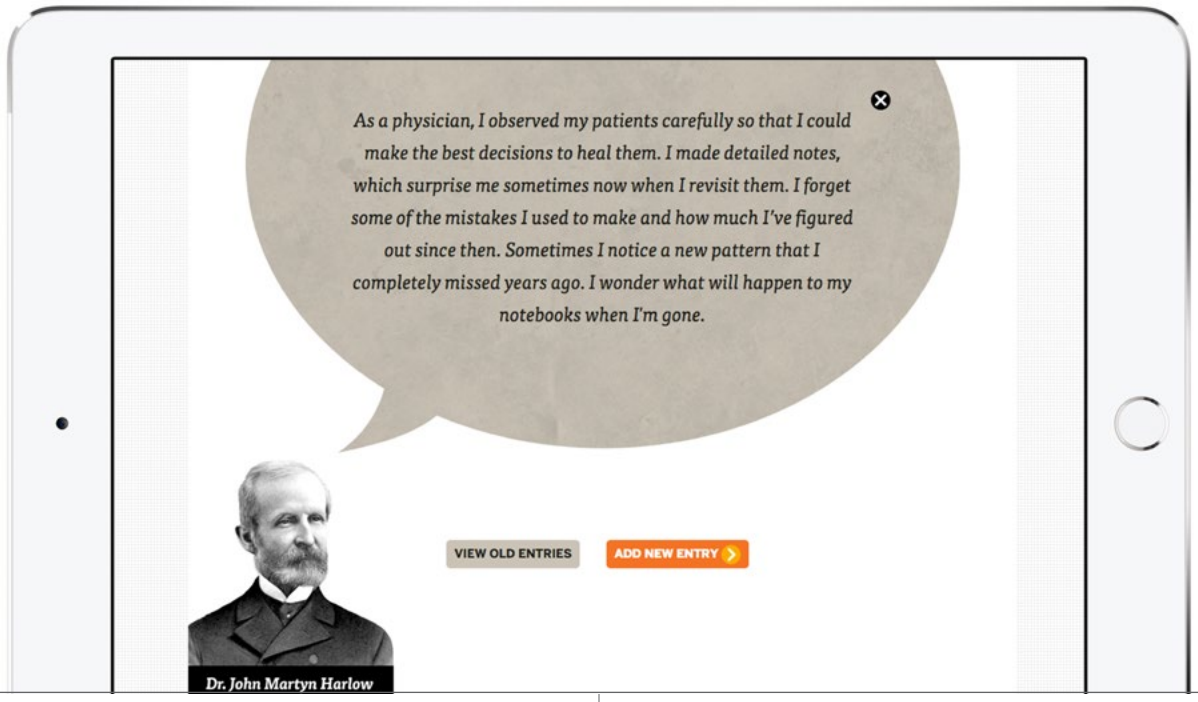
Skills, standards it addresses:
SL.6.5, SL.7.5, SL.8.5

Sampling of technology components and standards alignment

Reading

Misconception Notebook

The Misconception Notebook is one of many structured writing interfaces in which students document specific kinds of evidence that are relevant to a given text.



Why it is riveting	Why it is rigorous
In our science reading unit, students document the misconceptions of 19th-century doctors and early brain scientists. Students also document their own misconceptions. Students enjoy learning how wrong scientists can be. It raises philosophical questions—that students enjoy debating—about what it means to "know" something.	Gathering evidence from a source text in order to refute it in a piece of analytical writing is a fundamental skill. Becoming self-aware about how one's ideas can change as the evidence changes is a pillar of all intellectual development.

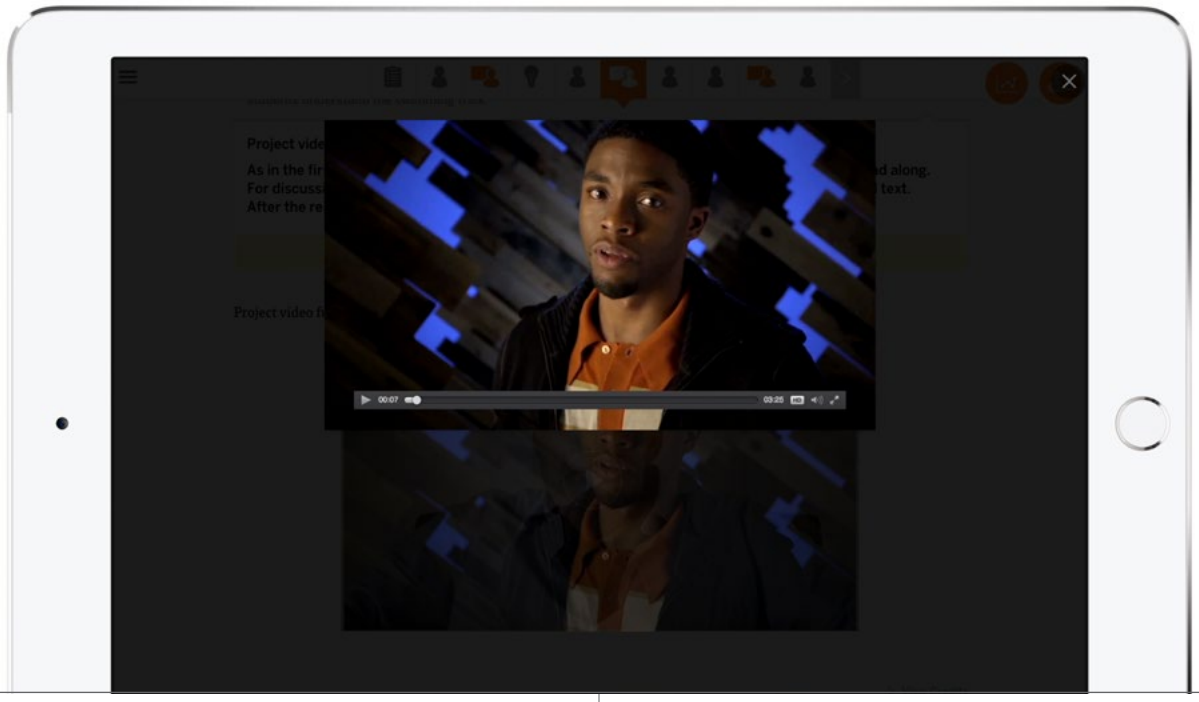
Skills, standards it addresses:
W.6.8, W.7.8, W.8.8

Sampling of technology components and standards alignment

Reading

Dramatic readings and animations

Amplify has invited "A-list" actors to perform dramatic readings of important texts and has collaborated with top filmmakers in interpreting literary works.



Why it is riveting	Why it is rigorous
In our testing, we found that most students struggled with the 19th-century eloquence of Frederick Douglass, but when they watched the dramatic performance of the first few pages of this text by Chadwick Boseman, they became engaged and read much more of the text, even parts we had not assigned. We also invited an Academy Award-winning animator to animate two Poe stories—and ask students to do detailed close readings of the ways in which the original text and the movie differ. Students are also invited to make their own films and post them on ProjectEd, described in more depth later in this secion.	We never provide the video performance for more than a few pages of a text. The idea is to get students engaged so that they will persevere in learning to experience the text on the page. In our pilot testing, we saw substantial increases in the amount of reading students did after watching a dramatic reading that piques their curiosity. Dramatic readings also contribute to speaking and listening in that students have models of excellent oral performances and learn to listen for subtle differences in how texts are performed by two different performers.

Skills, standards it addresses:
RL.6.7, RL.7.7, RL.8.7, SL.6.2, SL.7.2, SL.8.2

Sampling of technology components and standards alignment

Reading

Quests: social, narrative-driven performance tasks based on core texts

Several of our sequences of reading lessons culminate in a Learning Experience we call a Quest. A Quest is a multiday experiential simulation in which students work together, using evidence and ideas they have learned from their reading to solve a problem or experience a narrative.

Why it is riveting	Why it is rigorous
Quests are narrative-driven and fun. In most of them, students get to "play" a character—a scientist, a patient with a brain disorder, a character from a Poe story, a historian of American slavery, etc. Students step into the world of the text they have been reading in a way that enriches their experience and builds classroom community, while also practicing analytical reading skills (as well as writing, speaking, and listening).	Each Quest requires that students read complex texts in multiple formats and mediums. They must gather evidence both from these texts and from in-person (speaking and listening) interactions with other students and the teacher. Students learn that evidence matters and that reading makes you powerful to solve real problems in the world.

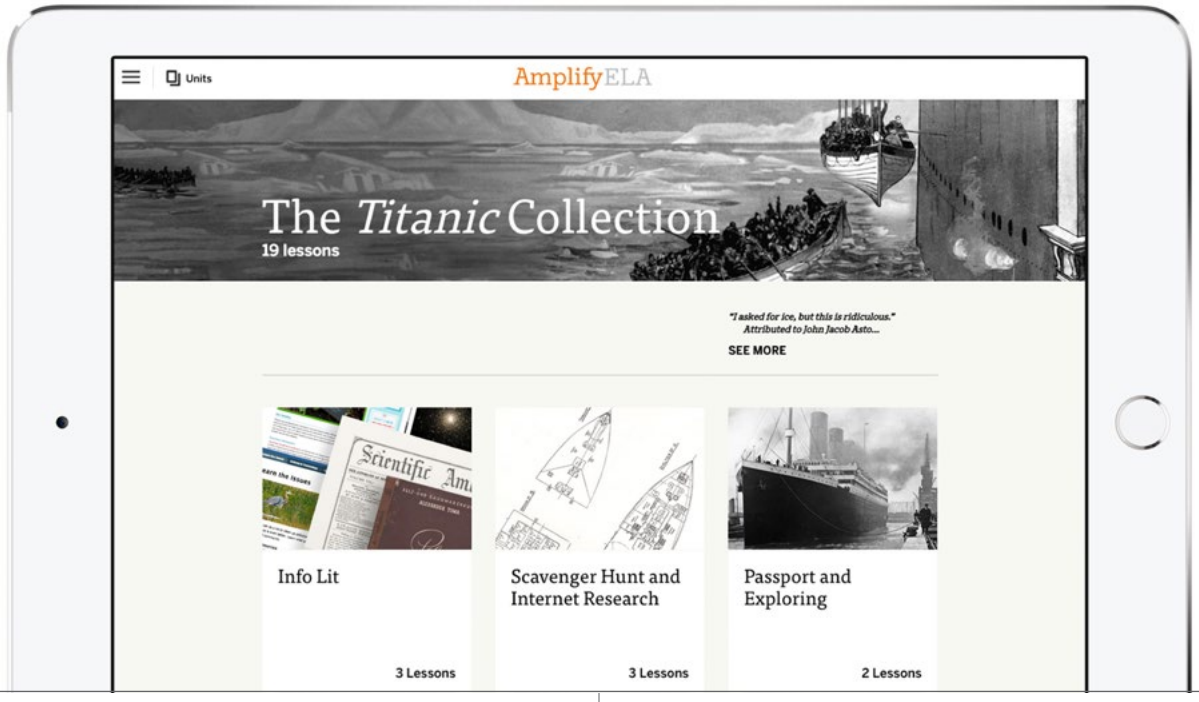
Skills, standards it addresses:
RI.6.7, SL.6.2, SL.7.2, SL.8.2

Sampling of technology components and standards alignment

Reading

Lapham's Quarterly Research Collections

The Amplify ELA Collections are mini research archives full of primary and secondary source documents on topics known to be of interest to many middle school students.



Why it is riveting	Why it is rigorous
Because superficial Internet searches often take the place of trips to the library, students may not have experienced how compelling it can be to do original research. The Collections immerse students in the research process, often with the help of a narrative hook (e.g. you are a passenger on the *Titanic* and you see each primary source document from the perspective of that character.)	In the age of Internet search engines, many students do "research" that goes no further than the first few search hits (usually Wikipedia). Our archives ensure that students are considering well-chosen documents, seeing multiple facets of an issue, and learning about the topic in prose, photographs, artifacts, poetry, and artwork. And teachers will be able to tell if students did in fact interact with each component of the Collection.

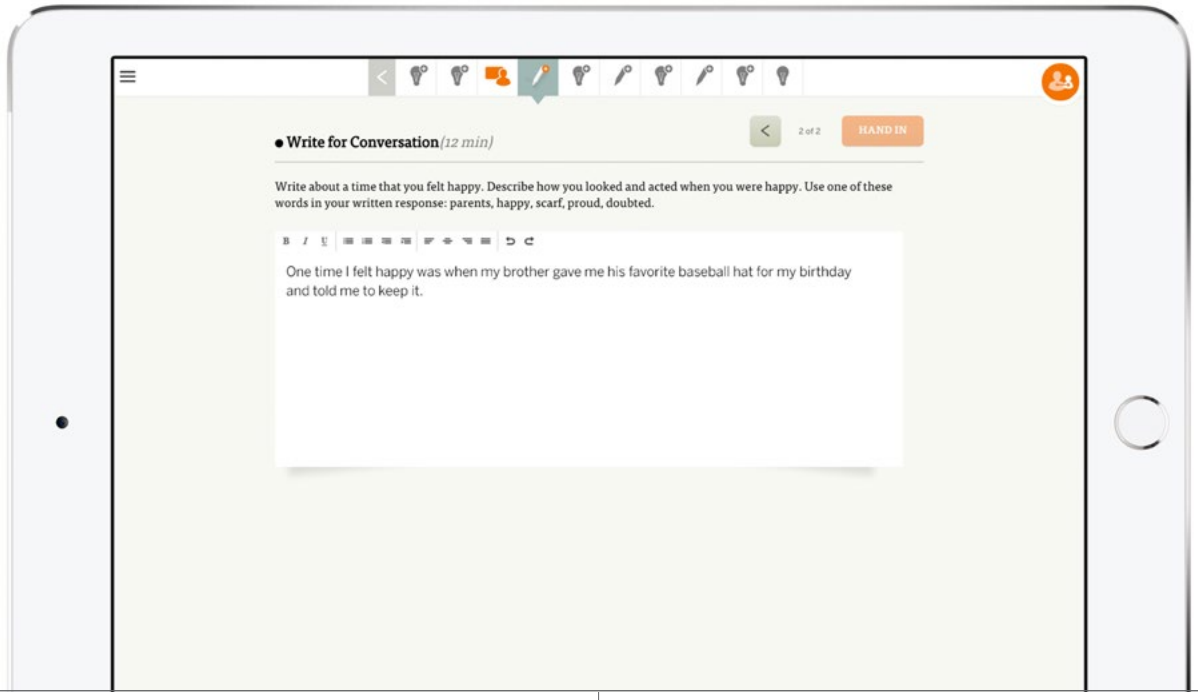
Skills, standards it addresses:
W.6.8, W.7.8, W.8.8

Sampling of technology components and standards alignment

Writing

eWriter with feedback tools

Students do many of their writing tasks in text windows built into the flow of each lesson. As students make progress on their writing, teachers can view and comment, and the teacher feedback is immediately (and discreetly) sent to the student.



Why it is riveting	Why it is rigorous
Our research indicates that many students will write more using digital tools than using pen and paper. Digital text is also easier to share, which in turn makes it easier to create a community of writers in a class. Receiving immediate feedback from the teacher is highly motivating—our data show that swift feedback is the single biggest driver of increasing student writing output.	The feedback tools enable teachers to make comments at key stages in the writing process. For teachers, the ability to swiftly track what kind of feedback they have provided in previous interactions, and to deliver feedback much faster than the standard 24+ hours for paper assignments, makes students more conscientious writers.

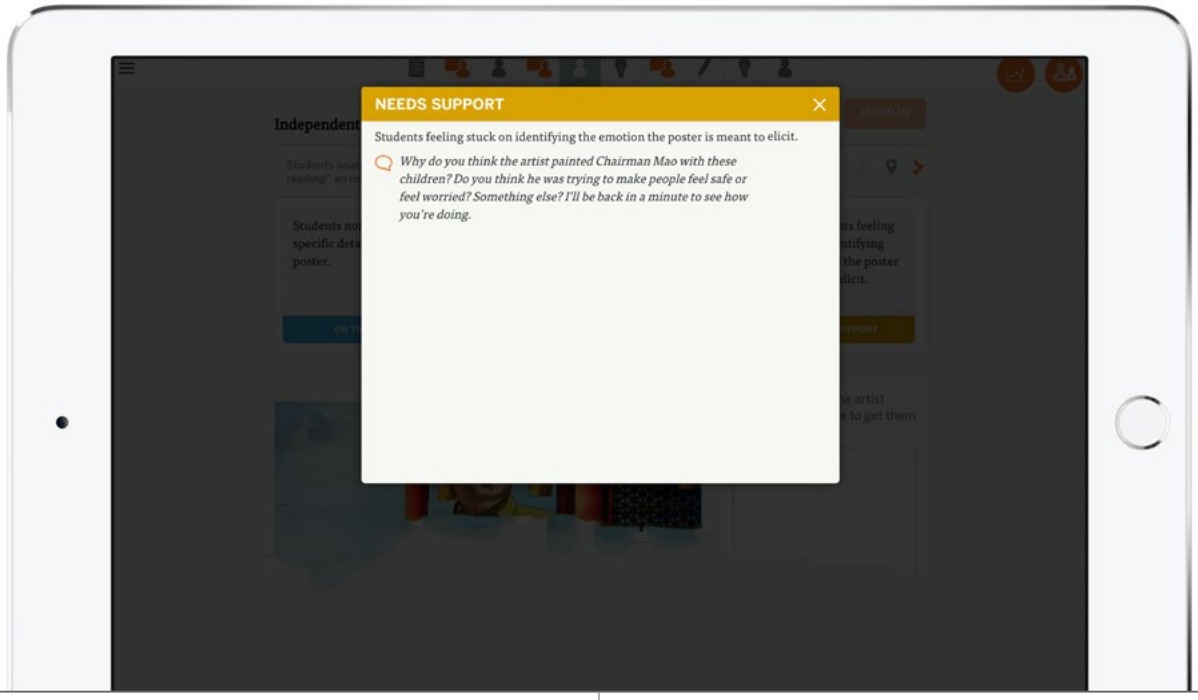
Skills, standards it addresses:
W.6.6, W.7.6, W.8.6

Sampling of technology components and standards alignment

Writing

Teacher Look Fors for over-the-shoulder conferences

Most writing assignments in Amplify ELA are accompanied by "Look Fors" for the teacher that highlight the common student behaviors—productive and unproductive—that occur as students tackle each assignment. Each look-for comes with a suggestion for how to give students feedback relevant to that behavior. Many of the look-fors specifically target ways to support English Learners.



Why it is riveting	Why it is rigorous
Students like to get feedback on their writing, and generally welcome help when they are stuck. Amplify ELA provides teachers with expert look-fors and accompanying teaching suggestions to help students get more engaged in their writing.	A preponderance of the look-fors are standards based—they refine the text-dependent questions in the writing prompts and encourage students to attend to particular writing skills (e.g., use of evidence, sentence conventions, responding to an audience).

Skills, standards it addresses:
W.6.6, W.7.6, W.8.6

Sampling of technology components and standards alignment

Writing

Interactive notebooks: detective notebook, research notebook, and graphic organizers

Many extended activities have a custom notebook, chart, or graphic organizer that helps students document the evidence they are gathering.

Why it is riveting	Why it is rigorous
Interactive notebooks make it possible for students to do more sophisticated types of evidence gathering than they might in an ordinary notebook—for example, structuring the events of a Sherlock Holmes mystery in sequence as presented in the story, and then in sequence as understood by Sherlock Holmes. Or there is a notebook for gathering symptoms of the brain disorders that will be used to draft the case studies in Perception Academy. Or, in the Langston Hughes poem, there is a table for tracking the relationship between the dream and what happens to it when it is deferred.	The ability to see the interconnections between observations one makes about a text is a fundamental skill for doing analytical, text-based writing. Many students struggle to make such connections and therefore have trouble structuring an analytical essay. These structured notebooks and organizers are like training wheels for analytical writing—once students have the experience of writing an essay based on well-structured evidence, they become interested in organizing their evidence even when no scaffolding exists.

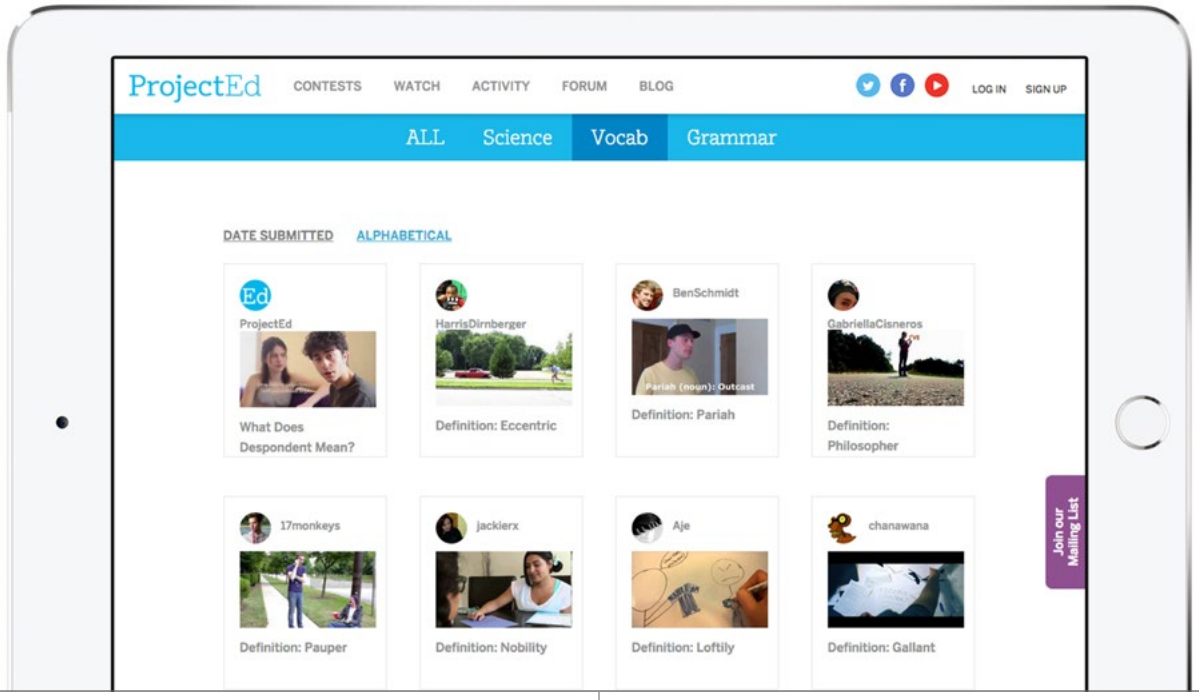
Skills, standards it addresses:
W.6.2a, W.6.8, W.7.8, W.8.8

Sampling of technology components and standards alignment

Writing

ProjectEd

ProjectEd is a website where students upload educational short videos and animated GIFs that they have made in response to topics and contests presented by Amplify. The ProjectEd website provides basic tutorials on how to make the different types of media presented.



Why it is riveting	Why it is rigorous
The opportunity to write, direct and perform in one's own short videos in a competition for real prizes is highly motivating for students. ProjectEd invites students to do this about vocabulary words, literary texts, science concepts, book trailers, setting a poem to music, etc. We have educator resources that help teachers use ProjectEd to motivate students to write. All submissions are published online, and a few are granted prizes.	The challenge of preparing work for publication to the larger world is something that many curricula neglect. Learning to take a source text (e.g., "The Raven") and represent it in multimedia (e.g., the Rhythm and the Raven competition on ProjectEd) gives students a particularly vivid experience of encountering texts in different formats.

Skills, standards it addresses:
SL.6.5, SL.7.5, SL.8.5

Sampling of technology components and standards alignment

Writing

Scriptus

Scriptus is an element of The World of Lexica™, our embedded ELA game world. Lexica is a series of adventures that take place in a mysterious 3D library, inhabited by characters from literature. After students have explored some of the areas of the library and met various characters, they learn that they can make their own rooms in the library and write their own narratives for the characters.

Why it is riveting	Why it is rigorous
The ability to build your own levels of a game is the most popular game dynamic for students in this age range. The most widely played of these commercial games lets you build physical spaces and actions, but has very primitive technology for crafting dialogue. Scriptus is different—it is all about writing dialogue in the non-linear world of a game. Students can write the drama of what different characters will say to a visitor to a room, and then invite their friends to visit that room and "experience" their text.	One of the key writing conventions for students to master is how to write dialogue and shape a narrative. Scriptus forces a student to think about how a text would be experienced by the reader—and then they can improve at this skill by watching how their friends interact with the world they are building.

Skills, standards it addresses:
W.6.6, W.7.6, W.8.6

Sampling of technology components and standards alignment

Speaking and listening

Text-based debates

The curriculum often structures classroom debates. Students use a chart, graphic organizer, or notebook to gather evidence in support of their position, and in some cases, to record evidence that may be used by their opponents in support of the opposing position.

Why it is riveting	Why it is rigorous
Often classroom debates seem contrived because students are placed arbitrarily on a side that they may not actually agree with, and they haven't gathered adequate evidence to make a convincing case. Amplify ELA invites students to develop their opinion, to gather evidence, and choose their position. The software enables the teacher to assemble debate teams that are genuinely arguing what they believe. There are also tools to help students collaborate with their "debate team" on evidence.	A debate that students are motivated to engage in is a great way to make the importance of evidence vivid to students. They also learn that the same piece of evidence may be used to make opposing arguments. A debate is a forum where prepared speaking skills come into play in presenting an opening argument. Listening skills come into play in grasping the opposing argument, and then impromptu speaking comes into play in doing rebuttal.

Skills, standards it addresses:

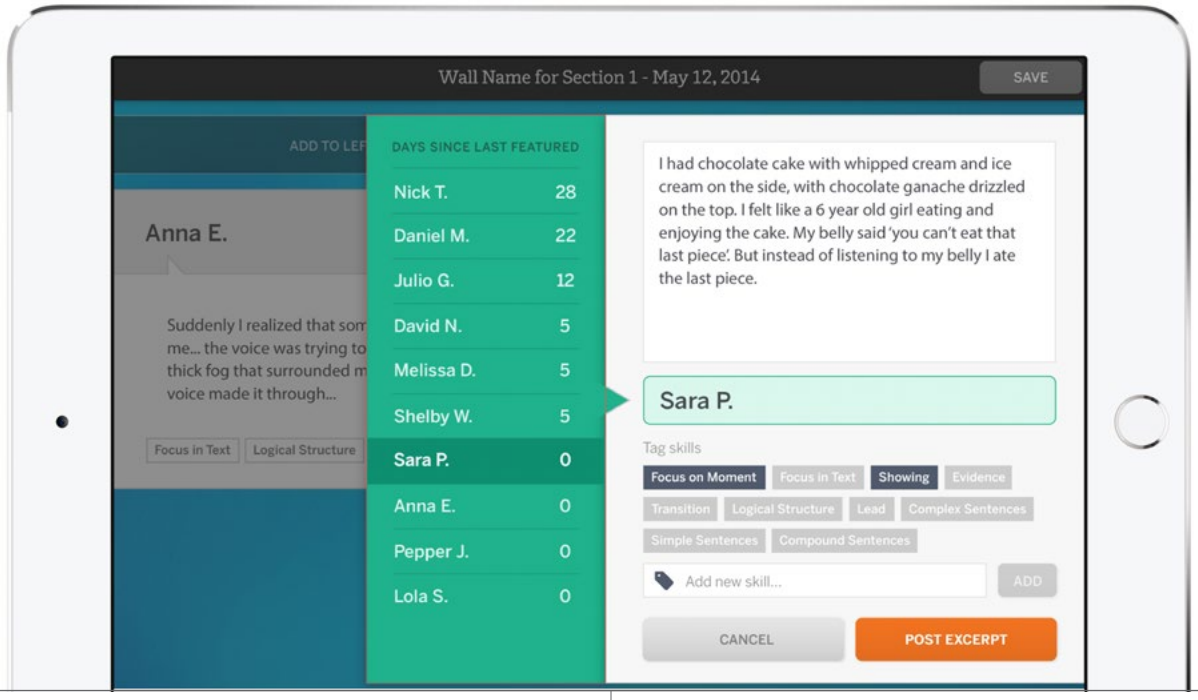
SL.6.2, SL.7.2, SL.8.2, SL.6.5, SL.7.5, SL.8.5

Sampling of technology components and standards alignment

Speaking and listening

Sharing protocols

The curriculum includes a set of classroom practices and procedures to be used repeatedly throughout the curriculum to support students in sharing constructively with peers.



Why it is riveting	Why it is rigorous
Amplify ELA has done extensive research on what kinds of sharing help to motivate students to read more and to write more. We have found that the single best motivator is when teachers choose a student to share after the teacher has been able to signal to that student that the student has done some good work. Through technology, a teacher can observe students' work in real time, making it possible for teachers to highlight student work immediately after it is produced. We have also provided sentence stems to make sure that peer feedback is constructive.	Students practice academic discourse, experience success sharing ideas with peers, and building on the ideas of others. Over the course of the year, the curriculum increases the complexity of what subjects students share and discuss and how open-ended the discussion can be.

Skills, standards it addresses:

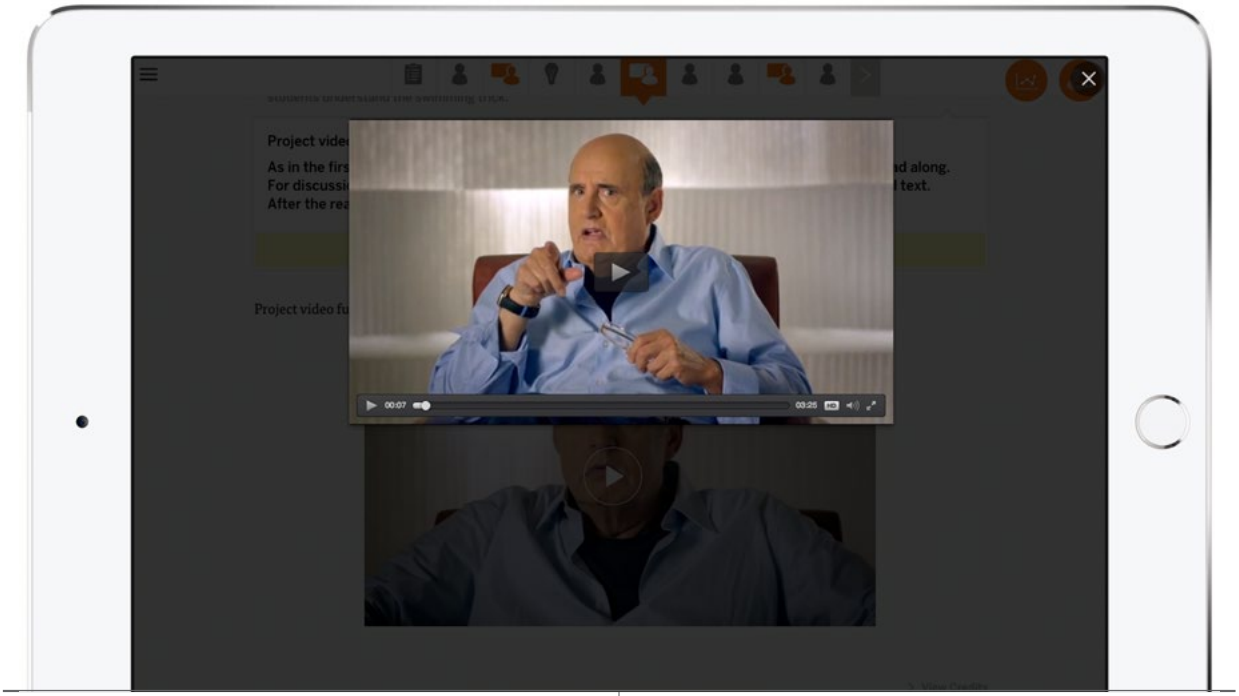
W.6.6, W.7.6, W.8.6

Sampling of technology components and standards alignment

Speaking and listening

Dramatic readings and performances

The curriculum frequently includes student performances of short passages from the text, sometimes performing the same text from multiple perspectives. In Quests, students are often called upon to "perform" a character in a narrative.



Why it is riveting	Why it is rigorous
Performing a text is often helpful to bringing it to life for the performer and for the audience. Watching a series of classmates interpret a text differently is a vivid way to see the text from multiple perspectives. To be able to transition to watching Sidney Poitier or Jeffrey Tambor perform that same text in a classroom video further expands a student's sense of what the text is and what a performance can be.	The standards emphasize the importance of helping students see the different ways that a text might be performed, or an argument might be expressed and how it changes as it moves from one format (on the page) to another format (on the stage). They also emphasize the importance of a student's ability to listen to peers and build upon their work. These classroom performances, and the role-playing exercises in the Quests, focus on these key speaking and listening standards.

Skills, standards it addresses:
SL.6.2, SL.7.2, SL.8.2, RL.6.7, RL.7.7, RL.8.7